

# Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon – Phase I (Brazil)

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## Final report

PD 57/99 Rev.2 (F)

### I. Introduction

The project was approved by the International Tropical Timber Council at its Twenty-seventh Session in November 1999 in Yokohama, Japan, and full financing was pledged at that same Session. The Agreement regulating the implementation of the project was signed in March 2001. The first disbursement of funds to the project was made in November 2002.

### II. Project Objective

The project's overall objective is to encourage the adoption of good forest management practices by medium and large timber enterprises in the Brazilian Amazon. More specifically, it aims to develop, test and evaluate a Forest Management System (FMS) for the effective and sustainable use of forest resources by timber enterprises working under typical production conditions found in the *terra firme* of the Brazilian Amazon and further widely disseminate it throughout the Amazon. In the project's first phase a Forest Management System Prototype (FMS-P) will be tested and validated at an operational scale by one timber enterprise in the Eastern Brazilian Amazon. In addition, a system to monitor the ecological, social and economic impacts of the FMS-P will be developed and tested.

### III. Project Achievements and Outputs

The Project's first phase was reported to the Secretariat as completed in May 2008. In accordance with the project document, the planned activities were carried out during the project's first phase lifespan and the main achievements can be summarized by major outputs as follows:

#### **Output 1. Develop and validate a Forest Management System (FMS) for medium and large timber enterprises**

- A Forest Management System (FMS) for effective and sustainable use of forest resources by medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon

was developed, tested, evaluated and have been adopted to a large extent by forest enterprises in the Brazilian Amazonia;

- Technical Guidelines for Forest Management as well as for Reduced Impact Logging - RIL were produced and applied by the partner enterprises *Juruá Florestal Ltda.* and *Cikel Brasil Verde Madeiras Ltda.*;
- Five software packages were developed, tested by the partner enterprises. Among them are MOP (Monitoring Enterprise Operational Performance), MEOF (Economic Monitoring of Forest Operations) and PLANEJO (Planning and Control of Forest Management Operations). These are currently being utilized by timber enterprises, research institutions, universities and government agencies involved with forest management.

### **Output 2. Develop and validate a system for monitoring and evaluating the social, ecological and economic impacts of the Forest Management System (FMS)**

- A tool to monitor the social, ecological and economic impacts of the FMS, including impacts on local communities and procedures to monitor logging damage was developed and disseminated to forest enterprises. In addition, the criteria and indicators as well as methodologies included in this tool are being used by universities and research institutions;
- ITTO Criteria and Indicators were applied in the Forest Management Units of Cikel (Rio Capim, ABC and Martins) and Juruá (Arataú and Santa Marta);
- A manual for auditing forest management projects was developed in collaboration with IBAMA; and
- The auditing procedures have been successfully implemented by IBAMA and the State Environment of Para (SEMA) for the analyses of forest management projects in the Amazon region located in public and private forests.

### **Output 3. Project results documented and disseminated through publications and technical meetings**

- Overall, the project has contributed to a wider dissemination of the FMS (through field days, training, courses, seminar, publications and technical meetings) amongst medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon, including those interested in certification and good forest management;
- More than 40 documents were prepared in the course of the execution of the project, including books, papers, manuals, progress reports, folders, banners etc.;
- Two field days were organized to the benefit of the forest enterprises, universities, and forestry-related public sector;;
- A home page (<http://www.cpatu.embrapa.br/BomManejo>) was created to disseminate the project's achievements;
- A final seminar was organized which was attended by nearly 200 people, including scientists, the industrial sector, policy makers and students; and
- Project results were also disseminated through presentations at many national and international conferences, technical meetings and through the involvement of graduate and undergraduate students.

#### **Output 4. A strategy and mechanism to transfer the FMS to timber enterprises of the Brazilian Amazon defined with the participation of relevant parties**

- A strategy and mechanism to transfer the FMS to timber enterprises were defined and is to be executed in the project's second phase;
- A revised proposal for the second phase of the project foresees EMBRAPA as its' executing agency, in collaboration with the Ministry of Environment through IBAMA and its Forest Management National Support Centre Forest Service (CENAFLOR);
- The Brazilian National Forestry Programme (PNF) and the Brazilian Forest Service (SFB) will be the main partner institutions in this project, together with the Instituto Floresta Tropical (IFT);
- CIFOR and the University of Freiburg (ALU-FR) will collaborate with institutional support; and
- In addition, a number of governmental and non-governmental institutions in the region will participate or benefit from the project.

#### **IV. Lessons Learnt**

Among the many lessons learnt, the following can be highlighted:

- Reduced impact logging (RIL) does not constitute a technical problem but a cultural challenge;
- The shift from conventional logging to good forest management requires considerable investments in equipment (in particular for skidding operations) and human resources (qualified staff, training), as well as strong organizational adjustments within the enterprise. Thus, the success to achieve such change depends mainly on the enterprise's managerial capacity;
- The social dimension is crucial for the long-term success of good forest management, and the involvement of social assistants in the enterprises' operations is essential to adequately address the social dimension of sustainable forest management;
- A better understanding of how timber industries operate is needed in order to provide insights to design more adequate strategies (e.g. incentives/ disincentives) for promoting the adoption of sustainable forest management;
- Investment in the systematic social and economic consolidation of rural Amazon is essential to ensure the long-term success of sustainable forest management initiatives;
- During the development of a project, all the relevant actors should be involved, so as to ensure relevance, viability and acceptance to project outcomes;
- Steering Committee's oversight is an important part of the project. There should have been more field visits during Steering Committee meetings; and
- Variations in exchange rates can seriously affect the execution of projects. The project had to take a rather drastic cost reduction program, which affected significantly the organization and the project staff, but fortunately did not compromise the project's results or its effectiveness. The receipt of additional counterpart support (Brazilian Forest Service and others) helped to ensure that the project successfully completed the planned activities and expected products.
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## V. Concluding Remarks

Overall, the project contributed towards the know-how for the development of sustainable forest management in the tropics and the good forest management practices currently being adopted by medium and large size timber enterprises in the *terra firme* of the Brazilian Amazon. Moreover, as this project originally contemplated two phases, of which only one phase was implemented under PD 57/99 Rev.2 (F), a new project was submitted for the implementation of the second phase, under the title PD 452/07 Rev.2 (F) “Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon – Phase II”. The present second-phase project will consolidate the tools for Sustainable Forest Management (SFM) developed in the first phase, build the capacity of training centers and universities of the Amazon region to transfer the SFM tools to timber enterprises and government environmental agencies responsible for forest management, evaluate the direct and indirect impacts of transferring the SFM tools to timber enterprises, and disseminate project achievements and products to a large audience of relevant stakeholders. Furthermore, PD 452/07 Rev.2 (F) has been approved for financing by the Council. As the ITTO Secretariat has received the Project Completion Report, several Technical Reports and other products, as well as the Final Financial Audit Report, the Committee on Reforestation and Forest Management declared the project completed, in November 2008.